

**AMENDMENTS TO THE CLAIMS**

1. (Currently amended): An image processing apparatus, comprising:  
an error adding unit for correcting the color of each pixel of an input image in accordance with an error data;  
an output color selector for converting the color corrected by the error adding unit to a single color selected from among a plurality of outputtable colors of the image processing apparatus;  
an error calculator for generating the error data for diffusing the color error converted by the output color selector to pixels peripheral to a target pixel, and contributing the error data to the error adding unit; and  
a noise overlay unit for superimposing Gaussian distribution noise on the input image and provided as a front stage to the error adding unit.
2. (Original): An image processing apparatus according to claim 1, wherein color of each pixel of an input image is corrected by vector error diffusion method.
3. (Original): An image processing apparatus according to claim 1, wherein the noise is color data having relation to the colorimetric value of each outputtable color.
4. (Original): An image processing apparatus according to claim 1, wherein the noise is selected so that the total sum of the relative amount of overlay noise is zero relative to the colorimetric value of each outputtable color.
- 5 (Currently amended): An image processing method, comprising ~~steps of~~:  
superimposing Gaussian distribution noise on an input image;  
correcting the color of each pixel of the noise superimposed input image in accordance with an error data;  
converting the corrected color to a single color selected from among a plurality of outputtable colors;  
generating the error data for diffusing the error generated when selecting the outputtable color of the target to pixels peripheral to the target pixel; and  
contributing the error data to said step of correcting.
6. (Currently amended): An image processing apparatus, comprising:

correcting means for correcting the color of each pixel of an input image in accordance with an error data;

converting means for converting the color corrected by said correcting means to an outputtable color;

generating means for generating the error data for diffusing the color error converted by said converting means to pixels peripheral to a target pixel;

contributing means for contributing the error data to said correcting means; and

superimposing means for superimposing Gaussian distribution noise on the input image and provided as a front stage to said correcting means.

7. (Currently amended): An image processing apparatus, comprising:

superimposing means for superimposing Gaussian distribution noise on an input image; and

correcting means for correcting color of each pixel of the image on which noise is superimposed by vector error diffusion method.

8. (Original): An image processing apparatus according to claim 7, wherein the noise is color data having relation to the colorimetric value of each outputtable color of the image processing apparatus.

9. (Original): An image processing apparatus according to claim 7, wherein the noise is selected so that the total sum of the relative amount of overlay noise is zero relative to the colorimetric value of each outputtable color.